

SITE MANAGEMENT PLAN TO RENDER OIL ISLAND UNATTRACTIVE TO WILDLIFE

Breitburn Energy Co. LP Alamitos Lease Seal Beach, California August 2006

Site Management Plan To Render Oil Island Unattractive to Wildlife

Breitburn Energy Company LP
Alamitos Lease
Seal Beach, California

1. Purpose

Breitburn Energy Company LP (Breitburn) has instituted this Site Management Plan (Plan) for the purpose of enhancing and formalizing an existing program to render Oil Island (Alamitos Lease) located in Seal Beach, California, unattractive to wildlife through a periodic program of vegetation control, pond water minimization, installation of bird repeller devices and inspection, recordkeeping and reporting procedures.

2. <u>Vegetation Control</u>

The majority of the vegetation occurs in and around the pond areas, most notably on the western side of the facility. The vegetation consists primarily of fast growing weeds with strong root systems. In order to minimize the growth of vegetation, Breitburn will utilize two methods of physical removal of the vegetation at intervals throughout the year as described below:

- a. <u>Backhoe Weed Digging</u>: A backhoe will be utilized once every year to physically dig out the weeds, attempting to dig out as much of the root systems as safely possible. The target areas will be in and around the periphery of the "ponds" and will extend into the ponds where safe to do so. Other areas, such as along the perimeter roads, will also be targeted if backhoe access is available. This action will be conducted after the winter rainy season. It is estimated that this will occur in April of each year, as weather permits. Backhoe-assisted weed removal will be documented in the inspection log.
- b. <u>Weed Whacker:</u> The weed whacker will be used to minimize plant growth during the summer months. The weed whacker will be used to cut any new growth that occurs after weed removal with the backhoe. This method will be used during August and October of each year. If growth is especially robust during any summer, additional vegetation control using the weed whacker will be conducted. Weed minimization with the weed whacker will be documented in the inspection log.

3. Pond Water Control

Rainwater collects in the ponds throughout the year, but most notably during the rainy season (October through May). Currently, there is no system in place to allow pond dewatering. Instead, water must be removed from the ponds through the use of vacuum

trucks. Not only is this costly, the pond water must reach high enough levels to allow the vacuum truck hoses to reach water levels and to remove water without pulling in too much of the sediment. To allow for a more efficient and cost-effective system, Breitburn will install "hard piping" into the middle of the ponds and extending to the edge of the pond. This will provide a hook-up for portable pumps to allow pumping off of the water. A stake will be placed into the deepest point of each pond with an easy-to-see visual level mark. The two ponds located on the northern half of the facility (Ponds 1 & 2) are the two deepest ponds. For those two ponds, the stakes will be marked at two feet from the bottom of the ponds. For the remaining three ponds (Ponds 3-5), which are shallower than the northern ponds, the stakes will be marked at one foot from the bottom of the ponds. When the water level reaches the specified level, the operators will begin pumping the water. A site diagram noting the location of the ponds is provided in Attachment A.

The water removed from the ponds will be collected and placed into rainwater holding tanks located onsite. Some water will accumulate prior to reaching the level marked on the stakes. To assist in discouraging birds from landing in the ponds, we will place floating "gater guard birdscarer" devices or other similar floating devices which will float on the water surface until the water reaches sufficient levels to initiate pumping. Additionally, as needed, we will affix "Irri-tape" (iridescent foil strips) to the tops of the level marking stakes or other stakes, as appropriate, to scare off birds.

Some of the water will then be re-injected into the formation. However, due to water compatibility problems, only a small portion of the pond water can be re-injected. Instead, the majority of the water collected in the rain water tanks will be used for dust suppression on the internal lease roads and work areas, most likely using a sprinkler type apparatus. Water will not be sprayed onto peripheral roads or surfaces to ensure that there will be no run-off to the refuge.

Installation of "hard piping" into the ponds and procurement of necessary pumps and other piping/collection systems will commence on approval of the plan and will be completed within six months of approval date.

4. <u>Bird Repeller Devices</u>

There are numerous bird repeller devices on the market. Repeller devices such as Irri-Tape, Terror-Eyes and Gator Guards will be purchased and placed at appropriate locations to repel birds from the site. The bird repeller devices will be moved periodically to ensure ongoing effectiveness, if any.

Devices that utilize ultrasound or noise technology to repel birds will not be used because they may disturb birds at adjacent, offsite locations.

5. Inspection, Recordkeeping and Reporting

Inspections will be conducted weekly to review the pond water levels, vegetation growth,

presence of wildlife, etc. The inspection will be documented in an inspection log which will be maintained at the lease office. A sample copy of the inspection log is found in Attachment B. Action items, if necessary will be noted and communicated to the Foreman and EH&S Manager. The Foreman and Operator will be responsible for implementation of the action items. The EH&S Manager will be responsible for follow-up. Completed action items will be noted on the log.

Annually, by June 30 of each year, a report will be prepared outlining the activities conducted under this plan and submitted to the U.S. Navy. The report will summarize the activities conducted during the past 12 months relative to this Plan.

6. Program Evaluation

Annually, the results of the weekly inspections will be reviewed to determine effectiveness of the Management Plan. Effectiveness of the Management Plan will be determined by the number of birds found on the island during the weekly inspections. The number of birds found on the island during the weekly inspections will be summarized in a table format and charted, as appropriate. This table will be included in the Annual Report specified in Item 5 above.

7. <u>Implementation Responsibilities</u>

Breitburn Lease Operators:

Vegetation Removal

Pond Water Level Monitoring & Pumping

Weekly Inspections

Inspection Documentation

Breitburn Production Engineer:

Rain Water Reinjection Capacity & Compatibility Determination

Breitburn Foreman:

Overall Plan implementation

EH&S Manager

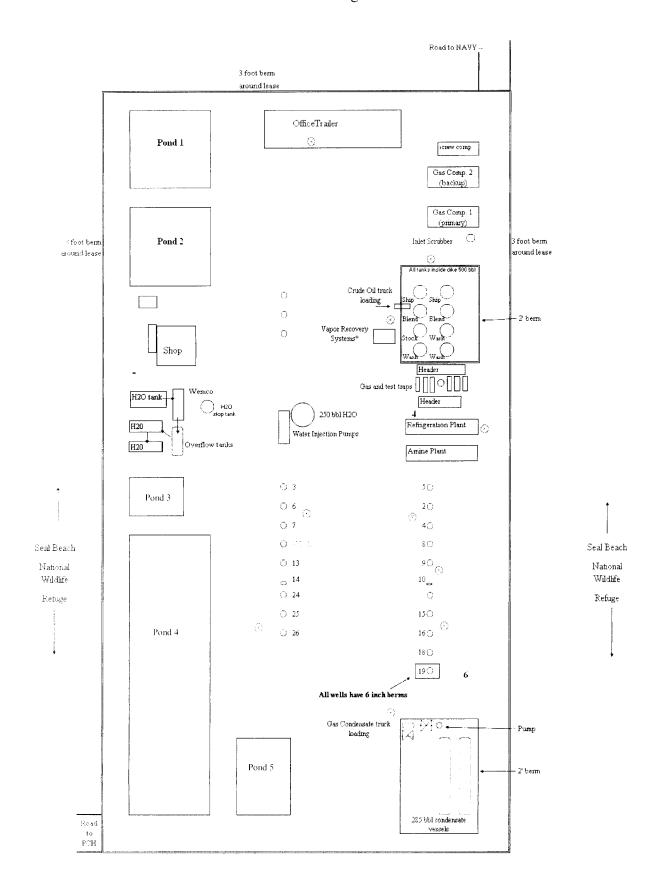
Overall Plan Follow-up

Annual Reporting

Liaison with Agency Personnel

Attachment A

Site Diagram



Attachment B

Sample Inspection Log

Date	Vegetation Low/Med /High	Pond Water Level General Description	Wildlife Present (Give Approx. No.)	Rotate Location of Bird Scaring Devices? (N/Y)	Action Required (Detail)	Action Communicated To	Date Action Completed
1 1 06	Low	Very little	2 birds Edge of Pond I	N	Add Irritape N E corner Pond l	Rosqui. Brock (email)	